

AI Solutions for Increased Port Efficiency



We are a Group prepared for the future



Defence



Air Traffic



Space



Mobility



Key Indicators
2025

5,457 M€
income

+13 %
from the previous period

+62.000
Professionals

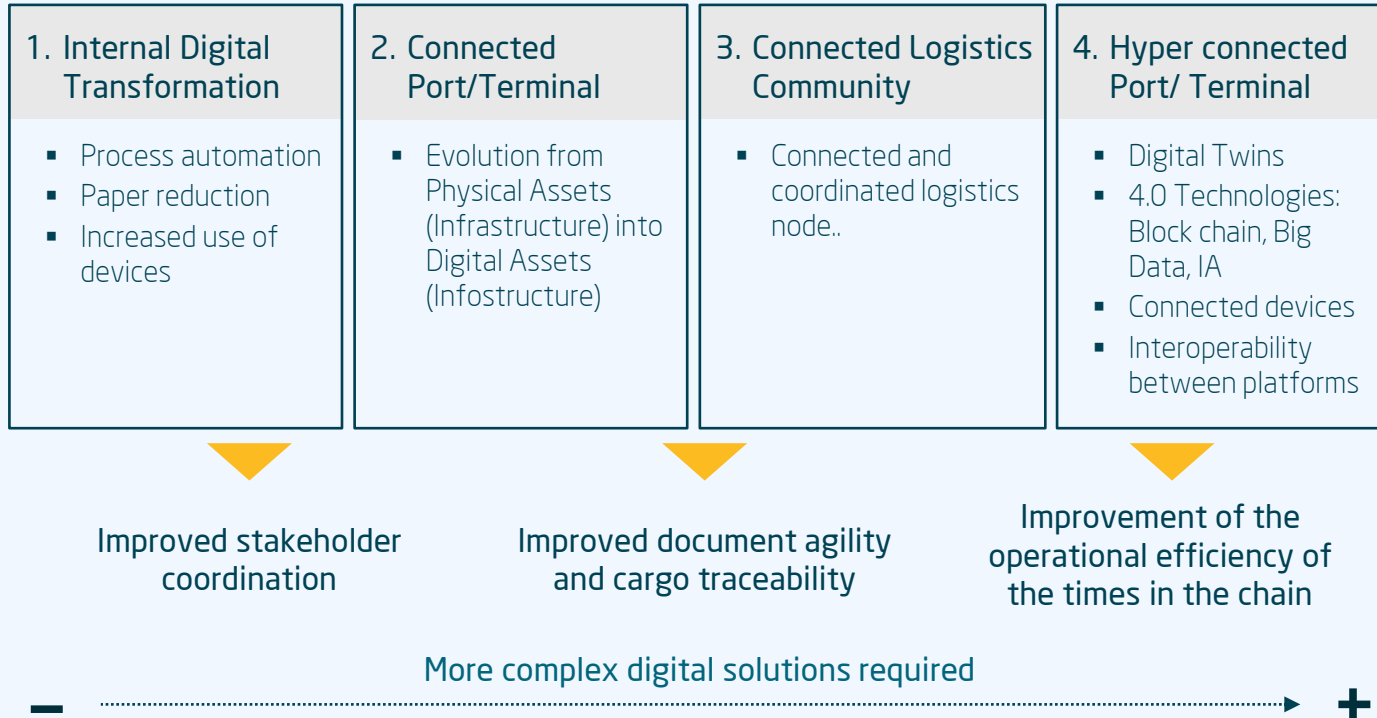
+140
Counties

8,7 %/Sales
R&D (€472 M€)

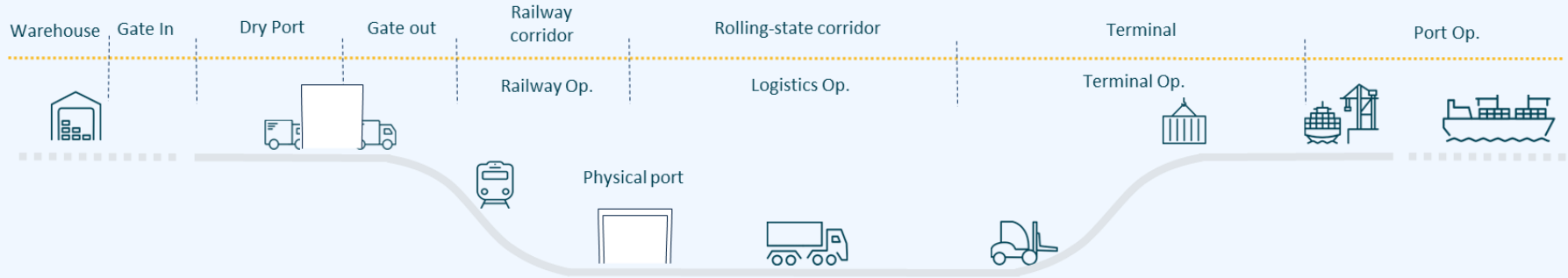
01 Road map to Efficiency

The Story So Far — and Indra Vision

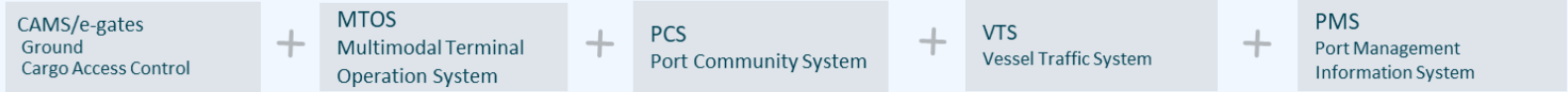
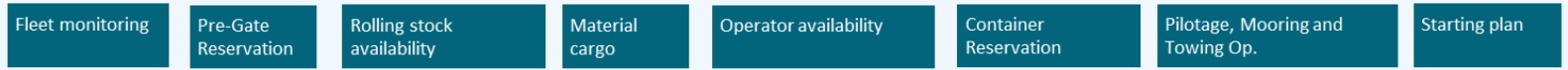
Digital transformation involves a paradigm shift in processes, operations and people, which must be undertaken in phases



End-to-End vision of the digital supply chain



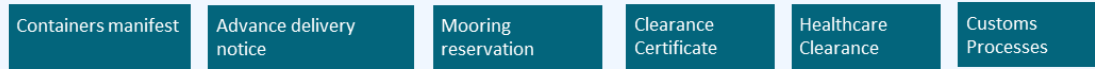
Physical flow load



Foreland

Hinterland

Document flow



02 Cargo Access Management System

Control Access Multimodal Terminals

1. Driver and truck enrollment
2. Terminal Appointment System
3. Gate Access



1. Driver and truck enrollment

Driver Data Capture

Driver's License



National ID / Passport



Biometric Data Capture: face / fingerprint



Sworn statement of data accuracy

2. Terminal Appointment System

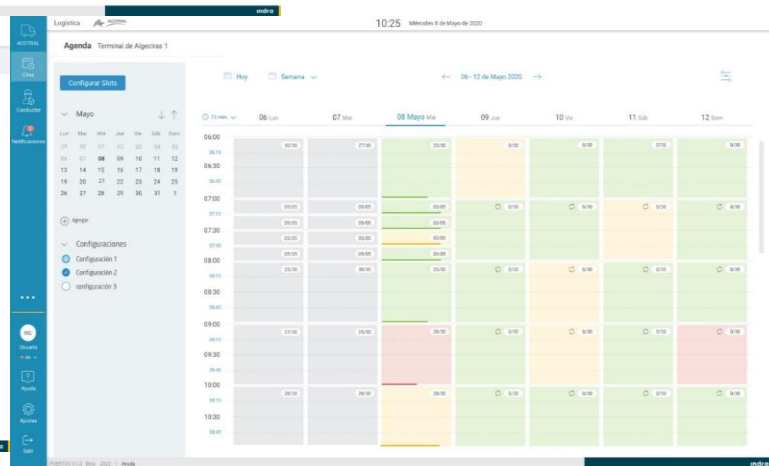
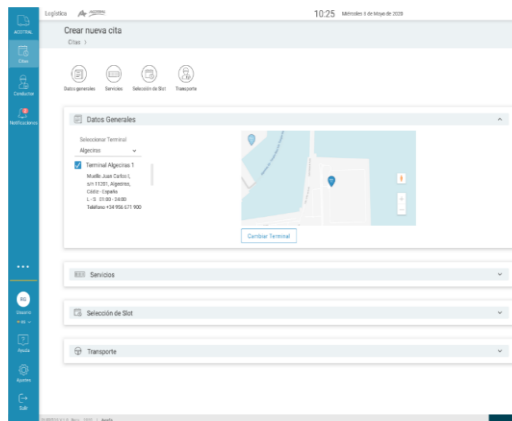
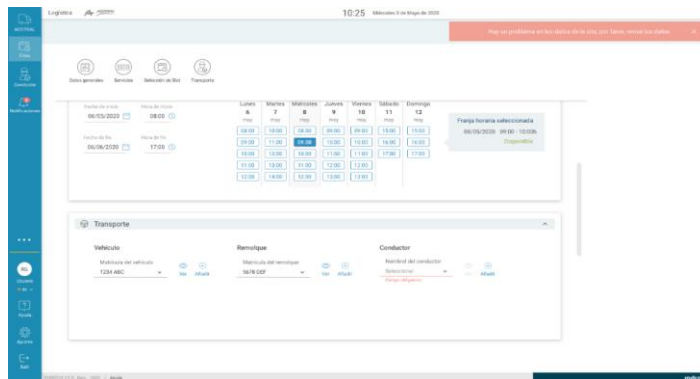
Scheduling for Activity Coordination

Description:

- Terminal Appointment System para la **managing truck entry** a la terminal generando un agendamiento de las cargas
- Optimization of **time** and **resources** for all users.

Features:

- TOS Integration**, for selecting cargo to deposit or pick up at the terminal – appointments can only be booked for cargo with an existing Booking.
- Time Slot Requests** submitted by freight forwarders and carriers for terminal access.
- Generation of a truck arrival plan** de la llegada de camiones a través de la información capturada.



3. Gate Access In & Out

Terminal Gate In and Gate Out System

Description: iCAMS (Cargo Access Management System)

- Deployed at highway tolls and terminal entrances (Port of Valparaíso, Ports of Portugal) for access control management.
- Fully automated terminal access, operable without human interaction.
- Integration with Indra-certified external container identification gantries.

Components:

- **Vehicle Identification** via OCR software (LPR)
- **Container Identification** – recognition of IMO codes and container ID
- **Identificación del conductor** – Atención usuario mediante reconocimiento biométrico. Kiosks

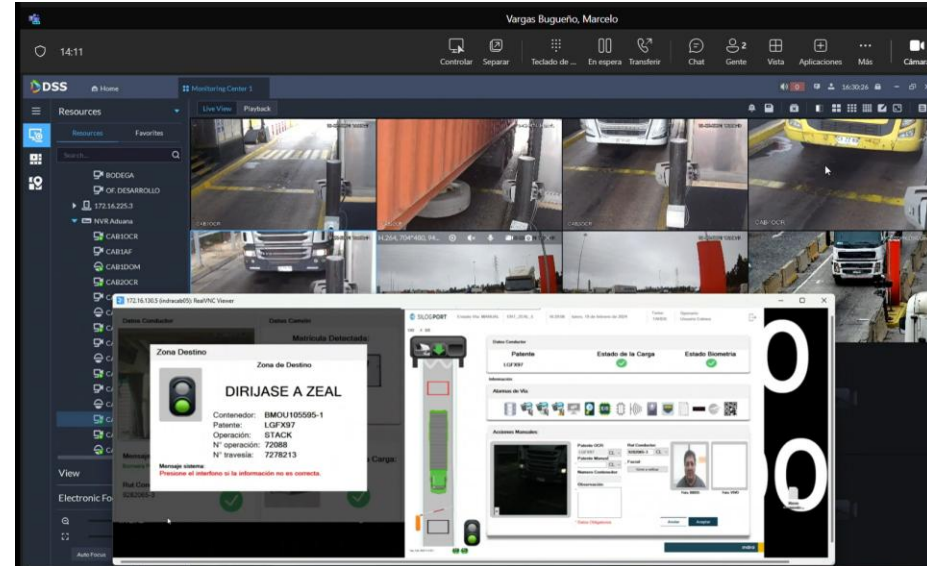
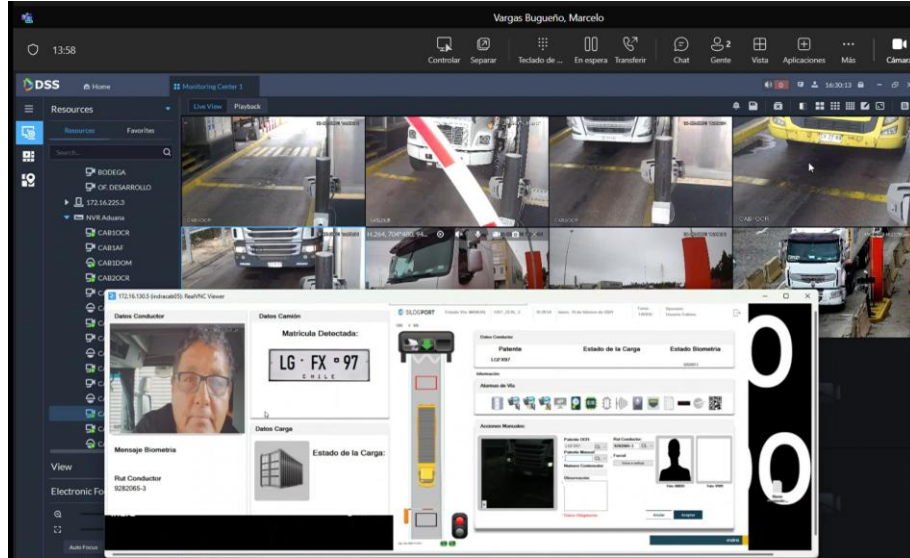
Indra's Access & Toll Management Product, available in three versions:

- **Indra Tolling Systems**, Road Infrastructure. (Stop & Go and Free - Flow)
- **Parking Solutions**, Terminales Ferroviarias & Aeroportuarias
- **Cargo Access Management Systems**, Ports and Maritime Terminals. (Stop & Go and Free - Flow)



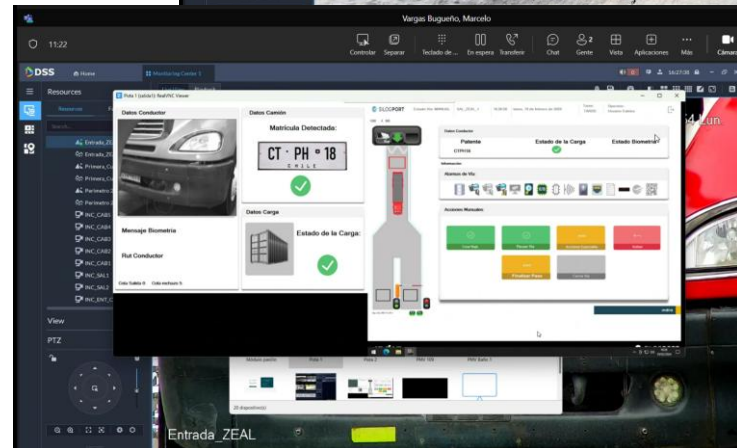
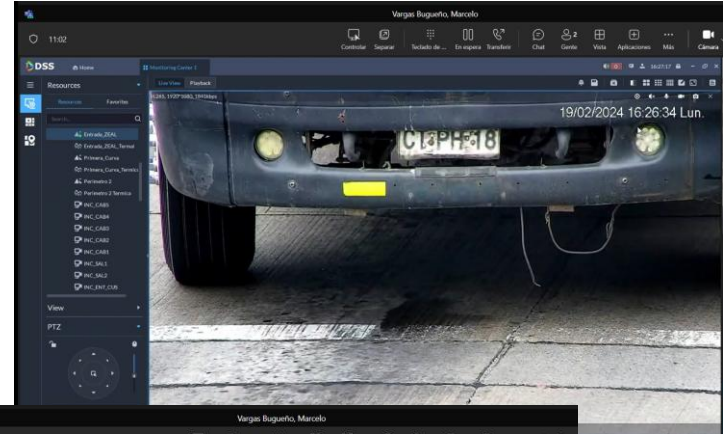
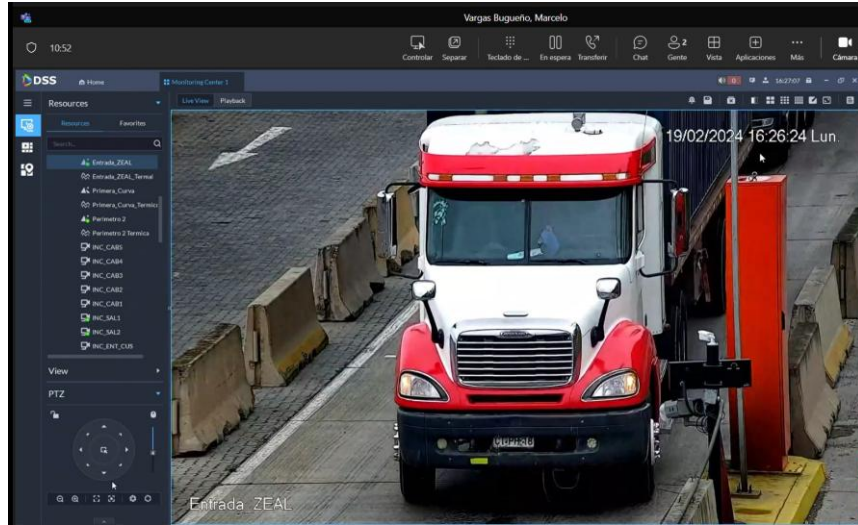
3. Gate Access In & Out

Vehicle and Container Recognition System



3. Gate Access In & Out

Vehicle and Container Recognition System



Video

3. Gate Access In & Out

Driver Recognition

Experience: Kiosks Indra

Reinvents the traveler experience by enabling seamless multimodal mobility and integrated access to transportation services..

Touchscreen, multilingual information kiosks adapt and personalize to each client's needs, delivering relevant information at every location.

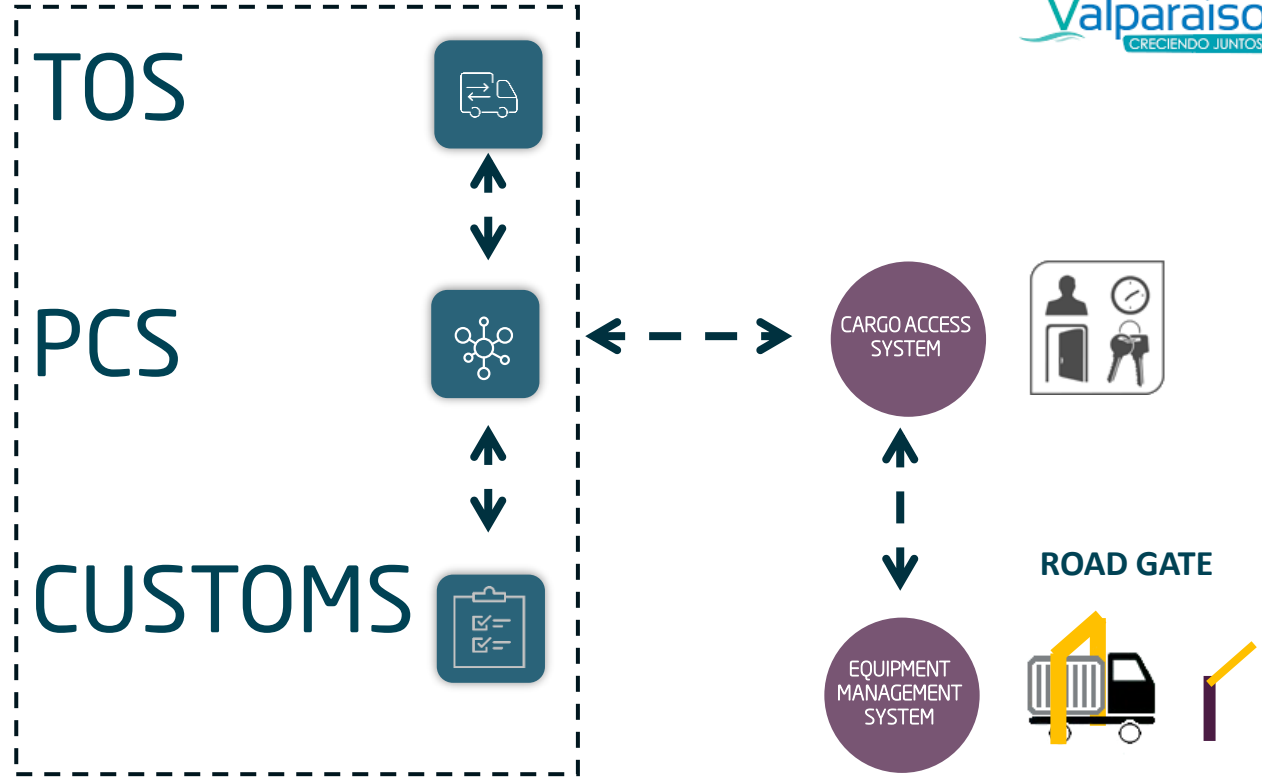
Components:

- Unattended driver identification via biometrics, using a camera and assistance monitor.
- Validation of the driver's digital ID to grant access.
- Kiosks for self-service



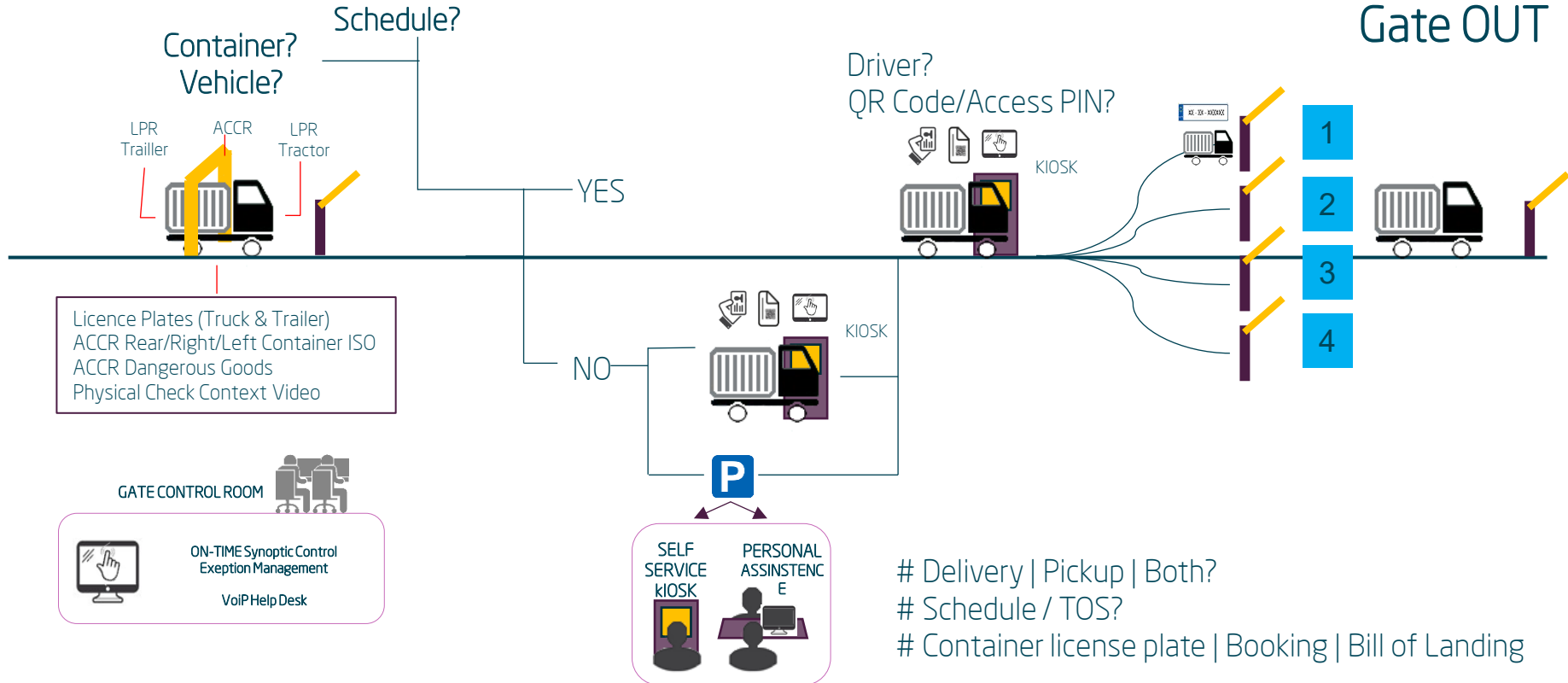
03 Success case in America

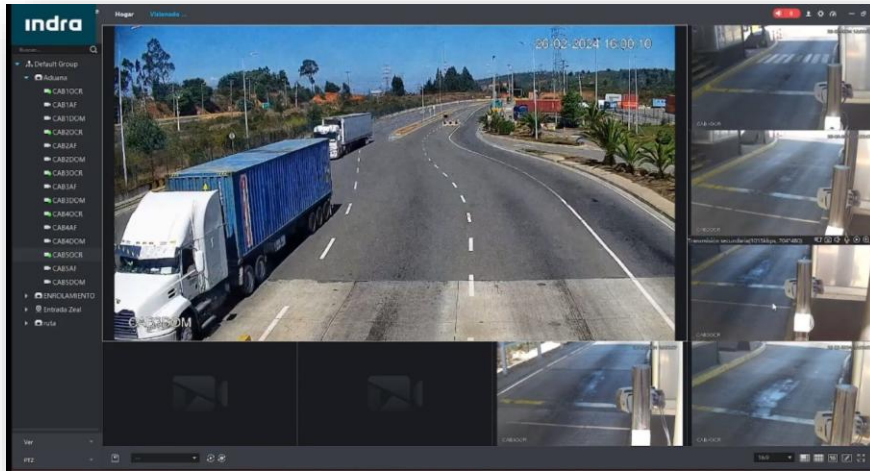
Port control system integration



ROAD GATE

Freeflow Gate





04 Benefits

AI for Automatization

Benefits



Port Terminal

Truck Drivers and Shippers

City and Hinterland

- **Optimized planning:** Levels demand by reducing arrival peaks, enabling accurate forecasting and efficient management to maximize terminal operational capacity, improving efficiency and profitability.
- **Cost:** Reduces counter staffing through digitization of manual processes.
- Improves vehicle flow.
- **Security:** Enhances security levels by blocking unauthorized vehicles, cargo, and individuals — and maintaining a full entry/exit log.
- **Competitiveness:** The ability to forecast and manage cargo flow more efficiently delivers a competitive edge for terminals and carriers.
- **100% Paperless**

- **Reduce truck waiting times**
- **Optimizing vehicle flow.**
- **Improves the user experience,** eliminating access queues and enhancing the end-customer experience.
- **Improves communication** between the Terminal, transport companies, and drivers..
- **Through the app,** drivers stay informed about their trip status and all processes linked to the cargo they carry.

- **Improves and optimizes the mobility of the entire terminal environment, eliminating bottlenecks at City access points.**
- **You reduce CO2.** Optimizing truck flow and reducing queues lowers CO₂ emissions — a key element in ensuring sustainable terminal growth.
- **Eliminates bad practices** caused by entry queues around terminal perimeters.

05 Things to think about

Thank You

Port Expansion, Innovation & Technology

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